CLAIMS

1. System for reproducing three-dimensional images, comprising:
   - a mobile screen (10; 36) that receives and reproduces images,
   - an optical device (20, 22; 38, 40) for producing an image (18) from the screen in space, and
   - synchronising means (32) that synchronise the nature of the produced images and the position of the screen with the spatial position of the viewer (12) relative to the system such that, on the one hand, the image always remains in the field of vision of the viewer, and, on the other hand, that the angle of view obtained on the screen corresponds to the position of the viewer, in particular, that of the viewer's face.
2. System according to claim 1 comprising devices for modifying the angle of view of the image that is to be reproduced depending on the viewer's displacement.
3. System according to claims 1 or 2, wherein the system comprises devices for detecting the viewer's spatial position in real time.
4. System according to one of claims 1 to 3 comprising a memory wherein a plurality of images of a same scene is stored in a plurality of angles of view, the synchronising means herein reproducing the image corresponding to the angle of view associated to the viewer's position.
5. System according to one of claims 1 to 3 comprising command devices taking pictures of a scene, by synchronising means, for taking the image of the scene in a viewer's angle which corresponds to the viewer's position.
6. System according to claim 5 wherein the picture-taking devices (70, 74) can be displaced depending on the viewer's position.

7. System according to claim 5 wherein the picture-taking devices are at least two cameras or analogues for taking two viewer's angles of the same scene, the synchronising means herein comprising processing means for reproducing the angle of view corresponding to the viewer's position form the two angles of view.
8. System according to one of the above-mentioned claims constituting a system that can be used for video conferences, wherein said systems contain a picture-taking device for reproducing, for a distant interlocutor, the image of the interlocutor who uses the system.
9. System according to one of the above-mentioned claims wherein the synchronising means comprise, on the one hand, means for detecting the position of the viewer's face or of a part of it, in particular, the eyes, and, at the other hand, for detecting another part of the viewer's body such as the hands or the feet, and processing means so that the apparition or the displacement of said other part of the body modifies the image obtained in three dimensions, this modification being for being for example a displacement, a deformation or changing of colour or texture.
10. System according to one of the above-mentioned claims, wherein the optical device (20, 22) has a fixed position.
11. System according to one of the claims 1 to 9 comprising a chassis (42)to which is attached, at one hand, the screen (36) and, at the other hand, the optical device (38, 40), wherein the screen and the optical device are attached to said chassis, the synchronising means comprising means for modifying the position of the chassis.
12. System according to one of the above-mentioned claims wherein the optical device comprises at least one spherical or parabolic mirror.